

AMENDMENTS TO SPECIFICATION

Please amend the specification by replacing the paragraph beginning at page 6, line 1 with the paragraph indicated below.

According to the present invention, wrought barstock used conventionally for forging feedstock is replaced with a metal mold cast bar, preform or other material exhibiting the required ductile strength and refined grain structure to be forgeable. Other methods for producing a bar or preform with a sufficient forgeability may be used such as metal powder consolidation forming, metal injection molding, solid free form fabrication, metal rapid prototyping, laser and electron beam forming, spray forming, and semi-solid forming processes, so long as the process provides sufficient heat transfer to impart a sufficiently rapid cooling rate in order to produce the fine grain structure and ductility, and, if desired, low-notch brittleness and other properties according to the present invention as discussed herein. This bar or preform may then be forged using a wrought process to produce grain size refinement and increase in material integrity. Thus, in addition to forming the pre-wrought material using a metal mold, there are at least two other categories of pre-wrought processes according to the present invention: (1) processes that achieve the necessary ductility and refined grain structure for wrought processing through rapid heat removal through the component or a quenching atmosphere; and (2) processes that achieve the necessary ductility and refined grain structure through consolidation of powder or semi-solid material under conditions which restrict coarsening of the grain structure.